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2/3,AB/1 (Item 1 from file: 5)

12376303 Biosis No.: 200000129805

A bone sialoprotein-binding protein from *Staphylococcus aureus*: A member of the staphylococcal Sdr family.

Author: Tung Hui-shan; Guss Bengt; Hellman Ulf; Persson Lena; Rubin Kristofer; Ryden Cecilia(a)

Author Address: (a)Department of Medical Biochemistry and Microbiology, Uppsala University, BMC, SE-751 23, Uppsala**Sweden

Journal: Biochemical Journal. 345 (3): p 611-619 Feb. 1, 2000

ISSN: 0264-6021

Document Type: Article

Record Type: Abstract

Language: English

Summary Language: English

Abstract: *Staphylococcus aureus* bacteria, isolated from bone and joint infections, specifically interact with bone sialoprotein (BSP), a glycoprotein of bone and dentine extracellular matrix, via a cell-surface protein of Mr 97000 (Yacoub, Lindahl, Rubin, Wendel, Heinegard and Ryden, (1994) Eur. J. Biochem. 222, 919-925). Amino acid sequences of seven trypsin fragments from the 97000-Mr BSP-binding protein were determined. A gene encoding a protein encompassing all seven peptide sequences was identified from chromosomal DNA isolated from *S. aureus* strain O24. This gene encodes a protein with 1171 amino acids, called BSP-binding protein (Bbp), which displays similarity to recently described proteins of the Sdr family from *S. aureus*. SdrC, SdrD and SdrE encode putative cell-surface proteins with no described ligand specificity. Bbp also shows similarity to a fibrinogen-binding protein from *S. epidermidis* called Fbe. A serine-aspartic acid repeat sequence was found close to the cell-wall-anchoring Leu-Pro-Xaa-Thr-Gly sequence in the C-terminal end of the protein. *Escherichia coli* cells were transformed with an expression vector containing a major part of the bbp gene fused to the gene for glutathione S-transferase. The affinity-purified fusion protein bound radiolabelled native BSP, and inhibited the binding of radiolabelled BSP to staphylococcal cells. Serum from patients suffering from bone and joint infection contained antibodies that reacted with the fusion protein of the BSP-binding protein, indicating that the protein is expressed during an infection and is immunogenic. The *S. aureus* Bbp protein may be important in the localization of bacteria to bone tissue, and thus might be of relevance in the pathogenicity of osteomyelitis.

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2/3,AB/3 (Item 3 from file: 5)

12115077 **Biosis No.:** 199900409926

Tracking adhesion factors in *Staphylococcus caprae* strains responsible for human bone infections following implantation of orthopaedic material.

Author: Allignet Jeanine; Galdbart Jacques-Olivier; Morvan Anne; Dyke Keith GH; Vaudaux Pierre; Aubert Sylvie; Desplaces Nicole; El Solh Nevine(a)

Author Address: (a)Unite des Staphylocoques, National Reference Center for Staphylococci Institut Pasteur, 72724, P**France

Journal: Microbiology (Reading) 145 (8): p 2033-2042 Aug., 1999

ISSN: 1350-0872

Document Type: Article

Record Type: Abstract

Language: English

Summary Language: English

Abstract: Ten *Staphylococcus caprae* strains isolated from four patients and responsible for bone infections following implantation of orthopaedic material were compared to four *S. caprae* strains collected from milk samples of healthy goats. The following characteristics were investigated: SmaI patterns, hybridization patterns with pBA2 (ribotypes), slime production, adhesion to matrix proteins (fibrinogen, fibronectin, collagen) and the staphylococcal adhesion genes (fnbA, clfA, cna, atlE, ica, fbe). None of the characteristics enabled us to distinguish the human strains from the goat strains. Slime was occasionally produced by *S. caprae* strains but all of them carried nucleotide sequences hybridizing at low stringency with the following genes: atlE encoding a *S. epidermidis* autolysin binding vitronectin and responsible for the primary adhesion to polystyrene, ica operon involved in the biosynthesis of a *S. epidermidis* extracellular polysaccharide, and the part of clfA encoding the serine-aspartate repeated region of a *S. aureus* cell-wall fibrinogen-binding protein.

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2/3,AB/4 (Item 4 from file: 5)

11523586 **Biosis No.:** 199800304918

A fibrinogen-binding protein of *Staphylococcus epidermidis*.

Author: Nilsson Martin; Frykberg Lars; Flock Jan-Ingmar; Pei Lei; Lindberg Martin; Guss Bengt(a)

Author Address: (a)Dep. Microbiol., Swedish Univ. Agric. Sci., Box 7025, S-750 07 Uppsala

**Sweden

Journal: Infection and Immunity 66 (6): p 2666-2673 June, 1998

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

Abstract: The present study reports on fibrinogen (Fg) binding of *Staphylococcus epidermidis*. Adhesion of different *S. epidermidis* strains to immobilized Fg was found to vary significantly between different strains, and the component responsible was found to be proteinaceous in nature. To further characterize the Fg-binding activity, a shotgun phage display library covering the *S. epidermidis* chromosome was constructed. By affinity selection (panning) against immobilized Fg, a phagemid clone, pSEFG1, was isolated, which harbors an insert with an open reading frame of apprx1.7 kilobases. Results from binding and inhibition experiments demonstrated that the insert of pSEFG1 encodes a specific Fg-binding protein. Furthermore, affinity-purified protein encoded by pSEFG1 completely inhibited adhesion of *S. epidermidis* to immobilized Fg. By additional cloning and DNA sequence analyses, the complete gene, termed fbe, was found to consist of an open reading frame of 3,276 nucleotides encoding a protein, called Fbe, with a deduced molecular mass of apprx119 kDa. With a second phage display library made from another clinical isolate of *S. epidermidis*, it was possible to localize the Fg-binding region to a 331-amino-acid-long fragment. PCR analysis showed that the fbe gene was found in 40 of 43 clinical isolates of *S. epidermidis*. The overall organization of Fbe resembles those of other extracellular surface proteins of staphylococci and streptococci. Sequence comparisons with earlier known proteins revealed that this protein is related to an Fg-binding protein of *Staphylococcus aureus* called clumping factor.

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2/3,AB/5 (Item 5 from file: 5)

08973686 **Biosis No.:** 199396125187

Multiple binding of type 3 streptococcal M protein to human fibrinogen, albumin and fibronectin.

Author: Schmidt Karl-Hermann(a); Mann Karlheinz; Cooney Jakki; Koehler Werner

Author Address: (a)Univ. Jena, Inst. Exp. Microbiol., Winzerlaer Strasse 10, D-0-6900 Jena

**Germany

Journal: FEMS Immunology and Medical Microbiology 7 (2): p 135-144 1993

ISSN: 0928-8244

Document Type: Article

Record Type: Abstract

Language: English

Abstract: M proteins are major virulence factors of group A streptococci which enable the bacteria to resist phagocytic attack. Their binding capacity for different plasma proteins seems to be one reason for the antiphagocytic activity of M protein. In the present study we demonstrate that M3 protein, isolated from the streptococcal culture supernatant of strain 4/55, and the recombinant form (rM3), purified from an *E. coli* lysate after cloning in phage lambda-EMBL3, show a multiple binding of fibrinogen, albumin and fibronectin in Western blot and dot binding assays. Binding of M3 protein to the multifunctional extracellular matrix and plasma protein fibronectin may not only influence phagocytosis but may also contribute to the adherence of these bacteria to endothelial and epithelial cells.

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2/3,AB/6 (Item 6 from file: 5)

03536869 **Biosis No.:** 000073039949

CLUMPING OF STAPHYLOCOCCUS-AUREUS BY HUMAN FIBRONECTIN

Author: ESPERSEN F; CLEMMENSEN I

Author Address: STATENS SERUMINSTITUT, DEP. OF CLINICAL MICROBIOL. AT HVIDOVRE HOSP., COPENHAGEN, DENMARK.

Journal: ACTA PATHOL MICROBIOL SCAND SECT B MICROBIOL 89 (5). 1981. 317-322.

Full Journal Name: Acta Pathologica et Microbiologica Scandinavica Section B Microbiology

CODEN: APBMD

Record Type: Abstract

Language: ENGLISH

Abstract: Clumping of different staphylococci by fibronectin and other purified plasma proteins was investigated. Purified fibronectin was capable of clumping *S. aureus* strains in concentrations identical with concentrations of fibronectin in human plasma. *S. epidermidis* and *S. saprophyticus* were not clumped by fibronectin. The binding of fibronectin to *S. aureus* was not mediated by protein A, as a strain lacking protein A clumped in the presence of fibronectin; the presence of IgG could not inhibit the clumping of *S. aureus* strains. The fibronectin-binding component on the staphylococcal cell wall seems to be unrelated to the fibrinogen-binding clumping factor.

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2/3,AB/2 (Item 2 from file: 5)

12147558 **Biosis No.:** 199900442407

Functional studies of a fibrinogen binding protein from *Staphylococcus epidermidis*.

Author: Pei Lei; Palma Marco; Nilsson Martin; Guss Bengt; Flock Jan-Ingmar(a)

Author Address: (a)Department of Immunology, Microbiology, Pathology, and Infectious Diseases, Karolinska Institutet, Huddinge University Hospital, F82, S-141 86, Huddinge**Sweden

Journal: Infection and Immunity 67 (9): p 4525-4530 Sept., 1999

ISSN: 0019-9567

Document Type: Article

Record Type: Abstract

Language: English

Summary Language: English

Abstract: A gene encoding a fibrinogen binding protein from *Staphylococcus epidermidis* was previously cloned, and the nucleotide sequence was determined. A portion of the gene encompassing the fibrinogen binding domain has now been subcloned in an expression-fusion vector. The fusion protein can bind to fibrinogen in a capture enzyme-linked immunosorbent assay and can be purified by fibrinogen affinity chromatography. This protein can completely inhibit the adherence of *S. epidermidis* to immobilized fibrinogen, suggesting that the adherence of *S. epidermidis* to fibrinogen is mainly due to this protein. Antibodies against this fibrinogen binding protein were also found to efficiently block the adherence of *S. epidermidis* to immobilized fibrinogen. Despite homology with clumping factors A and B from *S. aureus* (cell surface-associated proteins binding to fibrinogen), binding involved the beta chain of fibrinogen rather than the gamma chain, as in clumping factor A.

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2/3,AB/7 (Item 1 from file: 34)

08833836 **Genuine Article#:** 334ER **Number of References:** 36

The serine-aspartate repeat (Sdr) protein family in *Staphylococcus epidermidis*

Author: McCrea KW (REPRINT) ; Hartford O; Davis S; Eidhin DN; Lina G; Speziale P; Foster TJ; Hook M

Corporate Source: TEXAS MED CTR,INST BIOSCI & TECHNOL, 2121 W HOLCOMBE BLVD/HOUSTON//TX/77030 (REPRINT); TRINITY COLL DUBLIN,MOYNE INST PREVENT MED, DEPT MICROBIOL/DUBLIN 2//IRELAND/; FAC LAENNEC,EA 1655/F-69372 LYON 08//FRANCE/; UNIV PAVIA,DEPT BIOCHEM/I-27100 PAVIA//ITALY/

Journal: MICROBIOLOGY-UK , 2000 , V 146 , 7 (JUL) , P 1535-1546

ISSN: 1350-0872 **Publication date:** 20000700

Publisher: SOC GENERAL MICROBIOLOGY , MARLBOROUGH HOUSE, BASINGSTOKE RD, SPENCERS WOODS, READING RG7 1AE, BERKS, ENGLAND

Language: English **Document Type:** ARTICLE

Abstract: *Staphylococcus epidermidis* can express three different cell-surface-associated proteins, designated SdrF, SdrG and SdrH, that contain serine-aspartate dipeptide repeats. Proteins SdrF and SdrG are similar in sequence and structural organization to the Sdr proteins of *Staphylococcus aureus* and comprise unique 625- and 548-residue A regions at their N termini, respectively, followed by 110-119-residue B-repeat regions and SO-repeat regions. The C termini contain LPXTG motifs and hydrophobic amino acid segments characteristic of surface proteins covalently anchored to peptidoglycan. In contrast, SdrH has a short 60-residue A region at its N terminus followed by a SO-repeat region, a unique 277-residue C region and a C-terminal hydrophobic segment. SdrH lacks a LPXTG motif. Recombinant proteins representing the A regions of SdrF, SdrG and SdrH were expressed and purified from *Escherichia coli*. Antisera specific to these proteins were raised in rabbits and used to identify Sdr proteins expressed by *S. epidermidis*. Only SdrF was released from lysostaphin-generated protoplasts of cells grown to late-exponential phase. SdrG and SdrH remained associated with the protoplast fraction and thus appear to be ineffectively sorted along the conventional pathway used for cell-wall-anchored proteins. In Southern hybridization analyses, the sdrG and sdrH genes were present in all 16 strains tested, whilst sdrF was present in 12 strains. Antisera from 16 patients who had recovered from *S. epidermidis* infections contained antibodies that reacted with recombinant A regions of SdrG and SdrH, suggesting that these proteins can be expressed during infection.

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2/3,AB/8 (Item 2 from file: 34)

08753978 **Genuine Article#:** 326AT **Number of References:** 46

Identification of three essential regulatory gene loci governing expression of *Staphylococcus epidermidis* polysaccharide intercellular adhesin and biofilm formation

Author: Mack D (REPRINT) ; Rohde H; Dobinsky S; Riedewald J; Nedelmann M; Knobloch JKM; Elsner HA; Feucht HH

Corporate Source: UNIV HAMBURG,HOSP EPPENDORF, INST MED MIKROBIOL & IMMUNOL, MARTINISTR 52/D-20246 HAMBURG//GERMANY/ (REPRINT)

Journal: INFECTION AND IMMUNITY , 2000 , V 68 , N7 (JUL) , P 3799-3807

ISSN: 0019-9567 **Publication date:** 20000700

Publisher: AMER SOC MICROBIOLOGY , 1752 N ST NW, WASHINGTON, DC 20036-2904

Language: English **Document Type:** ARTICLE

Abstract: The formation of adherent multilayered biofilms embedded into a glycocalyx represents an essential factor in the pathogenesis of *Staphylococcus epidermidis* biomaterial-related infections. Using biofilm-producing *S. epidermidis* 1457 and transposon Tn917 carried on plasmid pTVlts, we isolated nine isogenic biofilm-negative transposon mutants. Transduction by *S. epidermidis* phage 71 was used to prove the genetic linkage of transposon insertions and altered phenotypes. Mapping of the different transposon insertions by Southern hybridization and pulsed-field gel electrophoresis indicated that these were inserted in four unlinked genetic loci. According to their phenotypes, including quantitative differences in biofilm production in different growth media, in the amount of the polysaccharide intercellular adhesin (PIA) produced, in the hemagglutination titers, and in the altered colony morphology, the mutants could be separated into four phenotypic classes corresponding with the genetic classes. Synthesis of PIA was not detectable with class I and II mutants, whereas the amount of PIA produced reflected the residual degree of biofilm production of class III and IV mutants in different growth media. Chromosomal DNA flanking the transposon insertions of five class I mutants was cloned and sequenced, and the insertions were mapped to different locations of icaADBC, representing the synthetic genes for PIA. Expression of icaADBC from a xylose-dependent promoter in the different isogenic mutant classes reconstituted biofilm production in all mutants. In a Northern blot analysis no icaADBC-specific transcripts were observed in RNA isolated from mutants of classes II, III, and IV. Apparently, in addition to icaADBC, three other gene loci have a direct or indirect regulatory influence on expression of the synthetic genes for PIA on the level of transcription.

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2/3,AB/9 (Item 3 from file: 34)

05738359 **Genuine Article#:** WU711 **Number of References:** 25

Studies on the interaction of *Staphylococcus aureus* and *Staphylococcus epidermidis* with fibronectin using surface plasmon resonance (BIAcore)

Author: Holmes SD (REPRINT) ; May K; Johansson V; Markey F; Critchley IA

Corporate Source: SMITHKLINE BEECHAM PHARMACEUT,DEPT BIOTECHNOL, YEW TREE BOTTOM RD/EPSOM KT18 5XQ/SURREY/ENGLAND/ (REPRINT); MICROBIOL RES/BETCHWORTH RH3 7AJ/SURREY/ENGLAND/; PHARMACIA BIOSENSOR,/S-75182 UPPSALA//SWEDEN/

Journal: JOURNAL OF MICROBIOLOGICAL METHODS , 1997 , V 28 , N1 (JAN) , P 77-84

ISSN: 0167-7012 **Publication date:** 19970100

Publisher: ELSEVIER SCIENCE BV , PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Language: English **Document Type:** ARTICLE

Abstract: This report provides a new technical approach for studying staphylococci adherence. The binding of staphylococci to fibronectin immobilised on a biosensor chip has been detected using surface plasmon resonance. *Staphylococcus aureus* had a much higher affinity for fibronectin than *Staphylococcus epidermidis* where binding could only be detected using the more sensitive BIAcore 2000. In the case of *S. aureus* a mutant strain which was defective in the expression of its fibronectin-binding proteins (Fbp's) was incapable of binding to fibronectin. In addition, the binding of whole cells of *S. aureus* to fibronectin was inhibited when the fibronectin coated biosensor chip was pre-treated with purified *S. aureus* FbpA. Surface plasmon resonance was also capable of studying bacterial interactions with intact or fragments of fibronectin and has shown that *S. aureus* preferentially binds to the N-terminal region whereas *S. epidermidis* binds to the C-terminal domain. BIAcore therefore provides us with an alternative method for comparing the interaction between bacteria and their isolated adhesin(s) for their affinities for a putative receptor which has been immobilised on the biosensor chip. (C) 1997 Elsevier Science B.V. All rights reserved.

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2/3,AB/10 (Item 4 from file: 34)

04689163 **Genuine Article#:** UA985 **Number of References:** 55

PHYSICAL AND BIOLOGICAL EFFECTS OF A SURFACE COATING PROCEDURE ON POLYURETHANE CATHETERS

Author: FRANCOIS P; VAUDAUX P; NURDIN N; MATHIEU HJ; DESCOUTS P; LEW DP

Corporate Source: UNIV HOSP GENEVA, DIV INFECT DIS/CH-1211 GENEVA

14//SWITZERLAND//; UNIV GENEVA, APPL PHYS GRP/CH-1211 GENEVA 4//SWITZERLAND//; SWISS FED INST TECHNOL, DEPT MAT/CH-1015 LAUSANNE//SWITZERLAND//

Journal: BIOMATERIALS , 1996 , V 17 , N7 (APR) , P 667-678

ISSN: 0142-9612

Language: ENGLISH **Document Type:** ARTICLE

Abstract: Central venous catheters are widely used in clinical practice; however, complications such as Venous thrombosis or infection are frequent. The physical and biological effects of a coating procedure designed to improve the blood-contacting properties of polyurethane central venous catheters (CVCs) were studied. The surface atomic composition of poly(vinyl pyrrolidone) (PVP)-coated or uncoated Pellethane(R) single lumen CVCs was characterized by electron spectroscopy for chemical analysis (ESCA), which confirmed the presence of an oxygen-rich PVP layer on the former material.

Topological analysis of both single and triple lumen CVCs by scanning force microscopy (SFM) revealed a very smooth surface in PVP-coated catheters compared to the more frequent surface irregularities found either in uncoated Pellethane(R) or in four additional randomly selected, commercially available triple lumen polyurethane CVCs. The PVP-coated Pellethane(R) showed a strong reduction in either fibrinogen or fibronectin adsorption compared to all other PVP-free polyurethane CVCs. This decreased protein adsorption led to a proportional reduction in protein-mediated adhesion of either *Staphylococcus aureus* or *Staphylococcus epidermidis* and in the binding of a monoclonal antibody directed against the cell-binding domain of fibronectin. Increased surface smoothness and hydrophilic properties of polyurethane CVCs might decrease the risk of bacterial colonization and infection.

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2/3,AB/11 (Item 5 from file: 34)

04235097 **Genuine Article#:** RQ379 **Number of References:** 38

**ADHERENCE CHARACTERISTICS OF COAGULASE-NEGATIVE STAPHYLOCOCCI
ISOLATED FROM PATIENTS WITH INFECTIVE ENDOCARDITIS**

Author: CREE RGA; PHILLIPS I; NOBLET WC

Corporate Source: UNITED MED & DENT SCH, ST THOMAS HOSP, DIV

MICROBIOL/LONDON SE1 7EH//ENGLAND/ ; UNITED MED & DENT SCH, ST THOMAS HOSP, DIV MICROBIOL/LONDON SE1 7EH//ENGLAND/; ST THOMAS HOSP, ST JOHNS INST DERMATOL, DEPT MICROBIAL DIS/LONDON SE1 7EH//ENGLAND/

Journal: JOURNAL OF MEDICAL MICROBIOLOGY , 1995 , V 43 , N3 (SEP) , P 161-168

ISSN: 0022-2615

Language: ENGLISH **Document Type:** ARTICLE

Abstract: Coagulase-negative staphylococci isolated from patients with endocarditis were divided according to whether the infection was of native or of prosthetic valves and was acquired either in the community or in hospital. Comparisons were made with strains from intravenous line-associated bacteraemias. All strains were examined by direct and indirect adherence tests. Line-associated bacteraemia strains were more likely to produce slime and were more hydrophilic but were less likely to attach HEp2 tissue culture cells than were endocarditis strains, and almost equally likely to adhere to plastic and extracellular matrix proteins. Amongst the endocarditis strains, there was little difference in slime production but hospital-acquired or prosthetic-valve strains were more hydrophobic and more likely to adhere to silicone than were the native-valve or community-acquired strains. Exposure of extracellular matrix proteins on native valves due to a pre-existing non-infective heart condition may account for the selection of strains able to adhere to fibronectin or laminin.

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2/3,AB/12 (Item 6 from file: 34)

03025968 **Genuine Article#:** MX269 **Number of References:** 42

ADHERENCE OF COAGULASE-NEGATIVE STAPHYLOCOCCI TO HEPARIN AND OTHER GLYCOSAMINOGLYCANs IMMOBILIZED ON POLYMER SURFACES

Author: PAULSSON M; GOUDA I; LARM O; LJUNGH A

Corporate Source: LUND UNIV,DEPT MED MICROBIOL,SOLVEGATAN 23/S-22362 LUND//SWEDEN/; LUND UNIV,DEPT MED MICROBIOL/S-22362 LUND//SWEDEN/; MEDICARB AB/BROMMA//SWEDEN/; KAROLINSKA INST,DEPT EXPTL SURG/S-10401 STOCKHOLM//SWEDEN/

Journal: JOURNAL OF BIOMEDICAL MATERIALS RESEARCH , 1994 , V 28 , N3 (MAR) , P 311-317

ISSN: 0021-9304

Language: ENGLISH **Document Type:** ARTICLE

Abstract: The adherence of clinical isolates of staphylococci to surfaces immobilized with various glycosaminoglycans (GAGs) was studied. In general, cells of strains of coagulase-negative (CNS) staphylococci showed a greater adherence to polyethylene surfaces than did cells of *Staphylococcus aureus*, as studied by bioluminescence. When the surface was heparinized, the adherence of staphylococcal cells decreased, but CNS cells still adhered in greater numbers than did cells of *S. aureus*. The adherence of CNS to serum-coated heparinized surfaces was of the same magnitude, or increased compared with nonheparinized surfaces. When the surfaces were preadsorbed with different proteins with known heparin-binding domains, i.e., vitronectin, fibronectin, laminin, or collagen, the *S. epidermidis* cells showed higher binding to heparinized surfaces than to nonheparinized ones, and also in greater numbers than did other staphylococcal cells. Different CNS strains showed a greater ability to agglutinate polystyrene beads immobilized with heparin than did *S. aureus*. The adherence of *S. epidermidis* strain 3380 to polyethylene coated with various GAGs such as heparin and chondroitin, dextran, dermatan, and heparan sulfate was shown to be pH-dependent, with the highest adherence at pH 7.2. This may indicate that CNS have the ability to bind to other domains of host proteins when they are adsorbed to heparinized surfaces, versus to nonheparinized ones. (C) 1994 John Wiley and Sons, Inc.

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2/3,AB/13 (Item 1 from file: 35)

01230678

ADHERENCE OF STAPHYLOCOCCUS EPIDERMIDIS TO BIOMATERIALS: A STUDY OF THE IMPORTANCE OF PHYSICO-CHEMICAL AND BIOLOGICAL FACTORS

Original Title: ADHERENCIA DE STAPHYLOCOCCUS EPIDERMIDIS A BIOMATERIALES: ESTUDIO DE LA IMPORTANCIA DE FACTORES FISICO-QUÍMICOS Y BIOLOGICOS

Author: CARBALLO RODRIGUEZ, JULIA

Year: 1990

Corporate Source/Institution: UNIVERSIDAD DE SANTIAGO DE COMPOSTELA (SPAIN) (5869)

Source: Volume 5303C of *Dissertations Abstracts International*.

PAGE 446.

ISBN: 84-7191-685-1

Publisher: SERVICIO DE PUBLICACIONES E INTERCAMBIO CIENTIFICO, UNIVERSIDADE DE SANTIAGO DE COMPOSTELA, SPAIN

Due to the general acceptance of adherence as the first step in the pathogenesis of prosthetic implants associated infections, we have analysed the adherence of coagulase-negative staphylococci (CNS) to biomaterials from a physico-chemical point of view in order to clarify the factors determining this process.

Our data indicate that adherence of bacteria to synthetic materials can be described in terms of the surface-free energy approach, since adherence occurs with negative variations of free energy of the process. However, adherence to bovine pericardium can not be thermodynamically explained because the variation of free energy of the process is positive, and electrostatic interactions seem to be more important in this case.

When prosthetic devices are in contact with blood, the formation of the so called "conditioning film" made up of proteins, mainly fibrinogen, determines their subsequent interactions with blood cells, surrounding tissues and bacteria. On the other hand, bacteria may be able of binding proteins from the medium or adsorbed in surfaces, thus colonizing implanted materials.

The inhibition of adherence detected in protein solutions seems to be due to the alteration of biomaterials and bacteria surface properties. Some of our strains could have receptors for fibrinogen and fibronectin, as shown by the increase and decrease, respectively, of adherence detected after their treatment with proteins. So we propose that bacterial binding of fibrinogen but not of that of fibronectin can be a mechanism of adherence of CNS to implanted biomaterials in contact with blood.

The results of our in vivo studies show that bacteria disappear in time from the surface of implanted catheters through mechanisms unclear at the moment.

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2/3,AB/14 (Item 1 from file: 73)

07677970 EMBASE No: 1999160080

Adherence of *Staphylococcus aureus* is enhanced by an endogenous secreted protein with broad binding activity

Palma M.; Haggar A.; Flock J.-I.

J.-I. Flock, Dept. of Immunology Microbiology, Karolinska Institutet, Huddinge University Hospital, S-141 86 Huddinge Sweden

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Journal of Bacteriology (J. BACTERIOL.) (United States) 1999 , 181/9 (2840-2845)

CODEN: JOBAA **ISSN:** 0021-9193

Document Type: Journal ; Article

Language: ENGLISH **Summary Language:** ENGLISH

Number Of References: 26

A novel mechanism for enhancement of adherence of *Staphylococcus aureus* to host components is described. A secreted protein, Eap (extracellular adherence protein), was purified from the supernatant of *S. aureus* Newman and found to be able to bind to at least seven plasma proteins, e.g., fibronectin, the alpha-chain of fibrinogen, and prothrombin, and to the surface of *S. aureus*. Eap bound much less to cells of *Staphylococcus epidermidis*, *Streptococcus mutans*, or *Escherichia coli*. The protein can form oligomeric forms and is able to cause agglutination of *S. aureus*. Binding of *S. aureus* to fibroblasts and epithelial cells was significantly enhanced by addition of Eap, presumably due to its affinity both for plasma proteins on the cells and for the bacteria.

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2/3,AB/15 (Item 1 from file: 76)

00883011 1067750

Isolation of *Staphylococcus aureus* clumping factor.

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INFECT. IMMUN. vol. 49, no. 3, pp. 700-708 (1985.)

Document Type: Journal article **Language:** ENGLISH

Subfile: Microbiology Abstracts Section B: Bacteriology

Immunochemically identical components were isolated from water-soluble phases of five *Staphylococcus aureus* strains by affinity chromatography on fibrinogen-linked Sepharose 4B. The elution was performed with 1 M MgCl₂ sub(2). The component could be isolated from sonicated preparations of whole cells, cell walls, and extracellular products of *S. aureus* but not from sonicated preparations of staphylococcal L-forms or from *Staphylococcus epidermidis*. By crossed immunoelectrophoresis the isolated component was demonstrated to bind to human fibrinogen. The finding that this purified component inhibited the fibrinogen-induced clumping of staphylococci strongly suggests that the component is the *S. aureus* clumping factor.

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2/3,AB/16 (Item 1 from file: 94)

00403397 **JICST Accession Number:** 87A0203800 **File Segment:** JICST-E

Characteristics of agglutination of *Staphylococcus aureus* induced by fibrinogen.

IWAMOTO TOORU (1); SASAKI TAKESHI (1); INAOKA MEGUMU (1)

(1) Ehimedai No

Ehime Daigaku Nogakubu Kiyo (Memoirs of the College of Agriculture, Ehime University) , 1986 , VOL.31,NO.3 , PAGE.219-228 , FIG.5, TBL.3, REF.10

Journal Number: F0619ABK **ISSN:** 0424-6829

Universal Decimal Classification: 579.22:577

Language: Japanese **Country of Publication:** Japan

Document Type: Journal

Article Type: Original paper

Media Type: Printed Publication

Abstract: Fibrinogen-induced agglutination of *Staphylococcus aureus* cells was reversible with respect to the change of pH value or ionic strength; agglutinated clumps were dispersed to return to the state of bacteria suspension and fibrinogen at pH higher than 9 or at more than 0.8M NaCl. The agglutination was strongly inhibited by 50mM calcium chloride. Fibrinogen was also bound to *S. epidermidis* cells at about 30% of binding to *S. aureus* cells. *S. aureus* cells treated by sonication, heating and digestion by trypsin lost 20-40% of the capacity to bind fibrinogen. About half of the binding of ¹²⁵I-labeled fibrinogen to *S. aureus* cells was not inhibited by unlabeled fibrinogen even at the concentration 20times higher than that of labeled fibrinogen. The bound fibrinogen was released from the cells with increase of sodium chloride concentration to 1M, but about 50% of it was not released even at the higher concentration.(author abst.)

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2/3,AB/17 (Item 1 from file: 144)

14248575 PASCAL No.: 99-0451486

Functional studies of a fibrinogen binding protein from *Staphylococcus epidermidis*

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Journal: *Infection and immunity*, 1999
, 67 (9) 4525-4530

Language: English

A gene encoding a fibrinogen binding protein from *Staphylococcus epidermidis* was previously cloned, and the nucleotide sequence was determined. A portion of the gene encompassing the fibrinogen binding domain has now been subcloned in an expression-fusion vector. The fusion protein can bind to fibrinogen in a capture enzyme-linked immunosorbent assay and can be purified by fibrinogen affinity chromatography. This protein can completely inhibit the adherence of *S. epidermidis* to immobilized fibrinogen, suggesting that the adherence of *S. epidermidis* to fibrinogen is mainly due to this protein. Antibodies against this fibrinogen binding protein were also found to efficiently block the adherence of *S. epidermidis* to immobilized fibrinogen. Despite homology with clumping factors A and B from *S. aureus* (cell surface-associated proteins binding to fibrinogen), binding involved the beta chain of fibrinogen rather than the gamma chain, as in clumping factor A.

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2/3,AB/18 (Item 1 from file: 148)

07806485 Supplier Number: 17001236 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Staphylococci - the emerging threat.

Finch, Roger C.; Hill, Philip; Williams, Paul

Chemistry and Industry , n6 , p225(4)

March 20 , 1995

ISSN: 0009-3068

Language: ENGLISH

Record Type: FULLTEXT

Word Count: 3019 Line Count: 00254

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2/3,AB/19 (Item 1 from file: 349)

00701147

POLYPEPTIDES AND POLYNUCLEOTIDES FROM COAGULASE-NEGATIVE STAPHYLOCOCCI

POLYPEPTIDES ET POLYNUCLEOTIDES ISSUS DU STAPHYLOCOQUE NEGATIF

QUANT A LA COAGULASE

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 0012689 A1 20000309 (WO 200012689)

Application: WO 99US19728 19990831 (PCT/ WO US9919728)

Priority Application: US 9898443 19980831; US 99117119 19990125

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 22400

English Abstract

Isolated proteins, designated SdrF, SdrG and SdrH, and their corresponding amino acid and nucleic acid sequences are provided which are useful in the prevention and treatment of infection caused by coagulase-negative staphylococcal bacteria such as *S. epidermidis*. The SdrF, SdrG and SdrH proteins are cell-wall associated proteins that specifically bind host proteins and which each have a highly conserved motif of which the consensus sequence is TYTFTDYVD. The proteins, antigenic portions thereof and anti-SdrF, SdrG and SdrH antibodies are also useful for the identification and diagnosis of coagulase-negative staphylococcal infections. In particular, the proteins are advantageous because they may be used as vaccine components or antibodies thereof, and they may be administered to wounds or used to coat biomaterials to act as blocking agents to prevent or inhibit the binding of coagulase-negative staphylococci to wounds or biomaterials.

French Abstract

La presente invention concerne des protéines isolées, appelées SdrF, SdrG et SdrH ainsi que leurs séquences d'acides aminés et d'acides nucléiques correspondantes qui sont utiles dans la prophylaxie et le traitement des infections provoquées par des bactéries

2/3,AB/20 (Item 2 from file: 349)

00700793

STAPHYLOCOCCAL IMMUNOTHERAPEUTICS VIA DONOR SELECTION AND DONOR STIMULATION

PROCEDE D'IMMUNOTHERAPIE CONTRE LES INFECTIONS STAPHYLOCOCCIQUES COMPRENANT LA SELECTION DES DONNEURS ET LA STIMULATION DES DONNEURS

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Patent and Priority Information (Country, Number, Date):

Patent: WO 0012132 A1 20000309 (WO 200012132)

Application: WO 99US19729 19990831 (PCT/ WO US9919729)

Priority Application: US 9898449 19980831

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 25860

English Abstract

A method and composition for the passive immunization of patients infected with or susceptible to infection from *Staphylococcus* bacteria such as *S. aureus* and *S. epidermidis* infection is provided that includes the selection or preparation of a donor plasma pool with high antibody titers to carefully selected *Staphylococcus* adhesins or MSCRAMMs, or fragments or components thereof, or sequences with substantial homology thereto. The donor plasma pool can be prepared by combining individual blood or blood component samples which have higher than normal titers of antibodies to one or more of the selected adhesins or other proteins that bind to extracellular matrix proteins, or by administering carefully selected proteins or peptides to a host to induce the expression of desired antibodies, and subsequently recovering the enhanced high titer serum or plasma pool from the treated host. In either case, the donor plasma pool is preferably purified and concentrated prior to intravenous introduction into the patient, and the present invention is advantageous in that a patient can be immunized against a wide variety of potentially dangerous staphylococcal infections. Kits

for identifying potential donor with high titers of the selected adhesins are also provided. The present invention thus provides methods and compositions which can be highly effective against infections associated with *Staphylococcus* bacteria.

French Abstract

On decrit un procede et une composition d'immunisation passive de patients contamines ou susceptibles d'etre infectes par des bacteries de *Staphylococcus* tels que le *S. aureus* et *S. epidermidis*. Le procede consiste a selectionner ou a preparer un pool de plasma donneur ayant un taux eleve d'anticorps destine a des adhesines de *Staphylococcus* ou a des constituants de surface de microbe reconnaissant les molecules matricielles adhesives (MSCRAMM) soigneusement selectionnes, ou bien a des fragments ou des constituants de ces derniers, ou encore a des sequences presentant une homologie substantielle avec ces derniers. Le pool de plasma donneur peut etre prepare par combinaison de sang individuel ou d'echantillons de composants sanguins possedant un taux d'anticorps superieurs a la normale par rapport a une ou plusieurs des adhesines selectionnees ou a d'autres proteines qui se lient a des proteines de matrices extracellulaires, ou au moyen de l'administration de proteines ou de peptides soigneusement selectionnes a un hote en vue d'induire l'expression d'anticorps desirés, suivie de la recuperation du pool de plasma ou de serum a taux eleve accru chez l'hote. Dans tous les cas, le pool de plasma donneur est de preference purifie et concentre avant son introduction par voie veineuse dans le patient, et la presente invention presente un interet du fait qu'un patient peut etre immunise contre une grande variete d'infections par staphylocoque potentiellement dangereuses. Des kits permettant d'identifier des donneurs potentiels ayant des taux eleves des adhesines selectionnees sont egalement decrits. La presente invention concerne par consequent des procedes et des compositions qui sont tres efficaces contre les infections associees aux bacteries de *Staphylococcus*.

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2/3,AB/21 (Item 3 from file: 349)

00700792

MULTICOMPONENT VACCINES VACCINS A PLUSIEURS CONSTITUANTS

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Patent and Priority Information (Country, Number, Date):

Patent: WO 0012131 A1 20000309 (WO 200012131)

Application: WO 99US19727 19990831 (PCT/ WO US9919727)

Priority Application: US 9898439 19980831

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 27293

English Abstract

Multicomponent vaccines are provided which aid in the prevention and treatment of staphylococcal infections and which include certain selected combinations of bacterial binding proteins or fragments thereof, or antibodies to those proteins or fragments. By careful selection of the proteins, fragments, or antibodies, a vaccine is provided that imparts protection against a broad spectrum of *< i> Staphylococcus* bacterial strains and against proteins that are expressed at different stages of the logarithmic growth curve. In one embodiment of the invention, a composition is provided that includes at least a collagen binding protein or peptide (or an appropriate site directed mutated sequence thereof) such as CNA, or a protein or fragment with sufficiently high homology thereto, in combination with a fibrinogen binding protein, preferably Clumping factor A ("ClfA") or Clumping factor B ("ClfB"), or a useful fragment thereof or a protein or fragment with sufficiently high homology thereto. The vaccines and products of the present invention are advantageous in that they respond to the urgent need of the medical community for a substitute for small molecule antibiotics, which are rapidly losing effectiveness and provide effective combinations of the large number of known bacterial surface adhesins which can impart effective protection against a broad spectrum of bacterial infections.

French Abstract

On decrit des vaccins a plusieurs constituants qui favorisent la prevention et le traitement des infections staphylococciques et qui contiennent certaines combinaisons selectionnees de proteines de liaison de bacterie ou des fragments de ces dernieres, ou encore des anticorps a ces proteines ou fragments. On selectionne avec soin les proteines, les fragments ou les anticorps pour produire un vaccin qui protege contre une grande diversite de souches bacteriennes de *< i> Staphylococcus* *< /i>* et contre des proteines qui sont exprimees a des niveaux differents de la courbe de croissance logarithmique. Dans une forme de realisation de l'invention, on prepare une composition qui contient au moins une proteine de liaison du collagene ou un peptide (ou bien une sequence mutee de cette derniere dirigee contre un site approprie) telle que CAN, ou une proteine ou un fragment presentant une homologie suffisamment forte avec cette derniere, en combinaison avec une proteine de liaison fibrinogenique, de preference un facteur d'agglutination A ("ClfA") ou un facteur d'agglutination B ("ClfB"), ou un fragment utile de ce dernier ou encore une proteine ou un fragment presentant une homologie suffisante avec ce dernier. Les vaccins et les produits de la presente invention sont interessants du fait qu'ils repondent au besoin urgent de la communaute medicale de trouver un substitut aux antibiotiques a molecules de petite taille, qui perdent rapidement leur efficacite, et du fait qu'ils constituent des combinaisons efficaces du grand nombre d'adhesines de surfaces de bacteries connues qui assurent une protection efficace contre une grande diversite d'infections bacteriennes.

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00547522

NEW FIBRINOGEN BINDING PROTEIN ORIGINATING FROM COAGULASE-NEGATIVE STAPHYLOCOCCUS
NOUVELLE PROTEINE DE FIXATION DE FIBRINOGENE TIRANT SON ORIGINE DU STAPHYLOCOQUE COAGULASE-NEGATIF

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Patent and Priority Information (Country, Number, Date):

Patent: WO 9748727 A1 19971224

Application: WO 97SE1091 19970618 (PCT/ WO SE9701091)

Priority Application: SE 9602496&SHY;3 19960620

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 8669

English Abstract

A new fibrinogen binding protein or polypeptide originating from coagulase negative staphylococci, biotechnological methods for producing said protein or polypeptide having fibrinogen binding activity and a recombinant DNA molecule coding for said protein (or fragments thereof), and micro-organisms (including viruses) containing this recombinant DNA molecule. The present invention further comprises the therapeutic and diagnostic use of said protein and/or DNA, e.g. a diagnostic kit for determining the presence and/or type of coagulase negative staphylococci and a vaccine composition, comprising said protein or DNA.

French Abstract

Nouvelle proteine ou nouveau polypeptide de fixation de fibrinogene tirant son origine des staphylocoques coagulase-negatifs, procede bio-technologique de production de cette proteine ou de ce polypeptide ayant une activite de fixation du fibrinogene et une molecule d'ADN de recombinaison codant ladite proteine (ou des fragments de celle-ci), et micro-organismes (y compris des virus) contenant cette molecule d'ADN de recombinaison. La presente invention concerne egalement l'utilisation therapeutique et diagnostique de ladite proteine et/ou l'ADN, par exemple un kit de diagnostic permettant de determiner la presence et/ou le type de staphylocoques coagulase-negatifs et

une composition de vaccin comprenant ladite protéine ou ADN.

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2/3,AB/23 (Item 1 from file: 357)

0252694 DBA Accession No.: 2000-07184 PATENT

Recombinant or synthetic proteins from coagulase-negative staphylococci useful for prevention, treatment and diagnosis of staphylococcal infections bind soluble and immobilized fibrinogen - Staphylococcus epidermidis recombinant Sdr protein and encoding gene for use in diagnosis, therapy as a recombinant vaccine and as a nucleic acid vaccine

Author: Foster T J; Hook M; Davis S; Hartford O; McCrea K; Ni Eiddhin D

Corporate Source: Dublin, Ireland; College Station, TX, USA.

Patent Assignee: Univ.Dublin-Queen-Elizabeth; Univ.Texas-A+M-Syst. 2000

Patent Number: WO 200012689 **Patent Date:** 20000309 **WPI Accession No.:** 2000-256637 (2022)

Priority Application Number: US 117119 **Application Date:** 19990125

National Application Number: WO 99US19728 **Application Date:** 19990831

Language: English

Abstract: A synthetic or recombinant Staphylococcus sp. Sdr protein, which is associated with the cell-wall, and binds to both soluble and immobilized fibrinogen, is claimed. The Sdr protein binds to both the alpha and beta chains of the fibrinogen. Also claimed is a nucleic acid derived from Staphylococcus epidermidis encoding the Sdr protein, and antibody or antisera specific to the Sdr protein, and a kit containing the protein, nucleic acid or antibody. These can be used for diagnosis, therapy and prevention of coagulase-negative staphylococcal infections, e.g. septicemia, osteomyelitis and endocarditis. Also disclosed are naturally occurring alleles of the Sdr gene, and recombinant vaccines or nucleic acid vaccines containing the Sdr protein or nucleic acid, respectively. The Sdr protein exhibits cation-dependent ligand binding, and contains a highly conserved motif with a given consensus protein sequence. The protein has a given 1,802 or 913 amino acid protein sequence, and is preferably produced by recombinant DNA technology, especially by expression of plasmid pGEX-2T in Escherichia coli. (104pp)

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2/3,AB/24 (Item 2 from file: 357)

0221634 DBA Accession No.: 98-03231 PATENT

New fibrinogen binding protein from coagulase-negative Staphylococcus

- Staphylococcus epidermidis recombinant protein expression using a plasmid, phage or phagemid vector, for use as a recombinant vaccine or nucleic acid vaccine

Author: Guss B; Nilsson M; Frykberg L; Flock J I; Lindberg M

Corporate Source: Uppsala, Sweden; Bromma, Sweden.

Patent Assignee: Guss B; Nilsson M; Frykberg L; Flock J I; Lindberg M 1997

Patent Number: WO 9748727 **Patent Date:** 971224 **WPI Accession No.:** 98-063079 (9806)

Priority Application Number: SE 962496 **Application Date:** 960620

National Application Number: WO 97SE1091 **Application Date:** 970618

Language: English

Abstract: A new fibrinogen binding protein is isolated from a coagulase-negative Staphylococcus sp. DNA encoding the protein may be inserted in a plasmid, phage or phagemid vector, for expression in a microorganism. The resulting recombinant protein may be purified from a culture of the microorganism by chromatography. An antibody specific for the protein is also new, and may be used in diagnostic, therapeutic or prophylactic applications, or to block adherence of staphylococci. The protein or DNA may be used as a recombinant vaccine or a nucleic acid vaccine, respectively, and the antibody may be used in passive immunization. A DNA probe based on the sequence may also be used to identify Staphylococcus epidermidis, in DNA fingerprinting of strains, and in isolating similar genes from other species. (45pp)

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2/3,AB/25 (Item 1 from file: 398)

CAS Registry Number: 291586-40-8

Molecular Formula: Unknown

CA Name:

HP= Fibrinogen-binding protein (Staphylococcus epidermidis strain K28 gene sdrG) (9CI)

Synonyms: GenBank AF245042-derived protein GI 8101007

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2/3,AB/26 (Item 2 from file: 398)

CAS Registry Number: 267626-47-1

Molecular Formula: Unknown

CA Name:

HP= DNA (Staphylococcus epidermidis strain K28 fibrinogen-binding protein gene sdrG) (9CI)

Synonyms: GenBank AF245042

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2/3,AB/27 (Item 3 from file: 398)

CAS Registry Number: 260383-22-0

Molecular Formula: Unknown

CA Name:

HP= DNA (Staphylococcus epidermidis gene SdrH) (9CI)

Synonyms: DNA (Staphylococcus epidermidis strain 9491 fibrinogen-binding protein gene sdrH);

DNA (Staphylococcus epidermidis strain 9491 gene sdrH plus flanks); GenBank AF245043; 5: PN:

WO0012131 FIGURE: 5 claimed DNA; 5: PN: WO0012689 FIGURE: 4 claimed DNA

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2/3,AB/28 (Item 4 from file: 398)

CAS Registry Number: 209677-52-1

Molecular Formula: Unknown

CA Name:

HP= Fibrinogen-binding protein (Staphylococcus epidermidis strain HB gene fbe) (9CI)

Synonyms: GenBank Y17116-derived protein GI 3201550

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2/3,AB/29 (Item 5 from file: 398)

CAS Registry Number: 209096-56-0

Molecular Formula: Unknown

CA Name:

HP= DNA (Staphylococcus epidermidis strain HB fibrinogen-binding protein gene fbe plus flanks) (9CI)

Synonyms: GenBank Y17116

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2/3,AB/30 (Item 1 from file: 399)

132217998 CA: 132(17)217998k PATENT

Sdr polypeptides and polynucleotides from coagulase-negative *Staphylococcus epidermidis*

Inventor (Author): Foster, Timothy J.; Hook, Magnus; Davis, Stacy; Hartford, Orla; McCrea, Kirk; Ni Eidhin, Deidre

Location: Ire.,

Assignee: The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin; The Texas A & M University System

Patent: PCT International ; WO 200012689 A1 **Date:** 20000309

Application: WO 99US19728 (19990831) *US 98443 (19980831) *US 117119 (19990125)

Pages: 104 pp.

CODEN: PIXXD2

Language: English

Class: C12N-015/00A; C12N-015/11B; C07H-021/02B; C07H-021/04B

Designated Countries: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

Designated Regional: GH; GM; KE; LS; MW; SD; SL; SZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

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2/3,AB/31 (Item 2 from file: 399)

132212703 CA: 132(16)212703a PATENT

Multicomponent vaccines for prevention of staphylococcal infections

Inventor (Author): Patti, Joseph M.; Foster, Timothy J.; Hook, Magnus

Location: USA

Assignee: Inhibitex, Inc.; The Texas A & M University System; The Provost Fellows and Scholars of the College of the Holy and UndividedTri

Patent: PCT International ; WO 200012131 A1 **Date:** 20000309

Application: WO 99US19727 (19990831) *US 98439 (19980831)

Pages: 115 pp.

CODEN: PIXXD2

Language: English

Class: A61K-039/395A; A61K-039/00B; C07K-014/00B; C07K-016/00B

Designated Countries: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

Designated Regional: GH; GM; KE; LS; MW; SD; SL; SZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

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2/3,AB/32 (Item 3 from file: 399)

132199034 CA: 132(15)199034m PATENT

Staphylococcal immunotherapeutics via donor selection and donor stimulation

Inventor (Author): Patti, Joseph M.; Foster, Timothy J.; Hook, Magnus

Location: USA

Assignee: Inhibitex, Inc.; The Texas A & M University System; The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth Near Dublin

Patent: PCT International ; WO 0012132 A1 **Date:** 20000309

Application: WO 99US19729 (19990831) *US 98449 (19980831)

Pages: 84 pp.

CODEN: PIXXD2

Language: English

Class: A61K-039/395A; A61K-038/00B; C07K-016/00B

Designated Countries: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

Designated Regional: GH; GM; KE; LS; MW; SD; SL; SZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

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2/3,AB/33 (Item 4 from file: 399)

128085161 CA: 128(8)85161n PATENT

Cloning and expression of a new fibrinogen-binding protein gene fig originating from coagulase-negative Staphylococcus

Inventor (Author): Guss, Bengt; Nilsson, Martin; Frykberg, Lars; Flock, Jan-Ingmar; Lindberg, Martin

Location: Swed.

Assignee: Guss, Bengt; Nilsson, Martin; Frykberg, Lars; Flock, Jan-Ingmar; Lindberg, Martin

Patent: PCT International ; WO 9748727 A1 **Date:** 19971224

Application: WO 97SE1091 (19970618) *SE 962496 (19960620)

Pages: 45 pp.

CODEN: PIXXD2

Language: English

Class: C07K-014/31A

Designated Countries: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; HU; IL; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ; VN; YU; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

Designated Regional: GH; KE; LS; MW; SD; SZ; UG; ZW; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG

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2/3,AB/34 (Item 5 from file: 399)

113002317 CA: 113(1)2317j JOURNAL

Binding of staphylococcal cell surface polysaccharide to human fibrinogen

Author: Ohtomo, Toshichika; Kobayashi, Tsugiaki; Ohshima, Yukio; Usui, Yukio; Suganuma, Masaru; Yoshida, Kosaku

Location: Sch. Med., St. Marianna Univ., Kawasaki, Japan, 213

Journal: Can. J. Microbiol.

Date: 1990

Volume: 36 **Number:** 3 **Pages:** 206-10

CODEN: CJMIAZ

ISSN: 0008-4166

Language: English

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2/3,AB/35 (Item 1 from file: 442)

00040238

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Potential Roles of Fibronectin in Cutaneous Wound Repair
(EDITORIAL REVIEW)

CLARK, RICHARD A. F.

Archives of Dermatology

February, 1988 ; 124: 201-206

Line Count: 00276 Word Count: 03810

ABSTRACT: Fibronectin has many potential roles in wound repair, including chemotactic factor activity for monocytes, fibroblasts, and endothelial cells; opsonin activity and opsonin promoter activity for microorganism and tissue debris; substratum for cell migration and localization; and a scaffold for building extracellular matrix. Although fibronectin has been reported to have intrinsic growth-promoting ability, coisolation of authentic growth factors with fibronectin raises doubts about this observation. Whether the addition of exogenous fibronectin to wounds can augment healing is a question for future studies.

AMA Journals (Dialog® File 442): (c)2001 Amer Med Assn -FARS/DARS apply. All rights reserved.

2/3,AB/36 (Item 1 from file: 654)

03130949

Utility

**METHODS FOR INHIBITION OF MEMBRANE FUSION-ASSOCIATED EVENTS,
INCLUDING INFLUENZA VIRUS**

Patent Number: 6,068,973

ISSUED: May 30, 2000 (20000530)

Inventor: Barney Shawn O'Lin Cary NC (North Carolina) US (United States of America)

Lambert Dennis Michael Cary NC (North Carolina) US (United States of America)

Petteway Stephen Robert Cary NC (North Carolina) US (United States of America)

Assignee: Trimeris Inc (A U.S. Company or Corporation) Durham NC (North Carolina) US (United States of America)

[Assignee Code(s): 52157]

Application Number: 8-485,551

FILED: June 07, 1995 (19950607)

This is a division of application Ser. No. 08-470,896, filed Jun. 6, 1995, which is a continuation-in-part of Ser. No. 08-360,107, filed Dec. 20, 1994, which is a continuation-in-part of Ser. No. 08-255,208, filed Jun. 7, 1994, which is a continuation-in-part of Ser. No. 08-073,028, filed Jun. 7, 1993, now U.S. Pat. No. 5,464,933, each of which is incorporated by reference in its entirety.

This invention was made with Government support under Grant No. AI-30411-02 awarded by the National Institutes of Health. The Government has certain rights in the invention.

Full Text: 41381 lines

ABSTRACT

The present invention relates to peptides which exhibit potent anti-retroviral activity. The peptides of the invention comprise DP178 (SEQ ID:1) peptide corresponding to amino acids 638 to 673 of the HIV-1 sub LAI gp41 protein, and fragments, analogs and homologs of DP178. The invention further relates to the uses of such peptides as inhibitory of human and non-human retroviral, especially HIV, transmission to uninfected cells.

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2/3,AB/37 (Item 2 from file: 654)

03065077

Utility

SEQUENCE-DIRECTED DNA BINDING MOLECULES COMPOSITIONS AND METHODS

Patent Number: 6,010,849

ISSUED: January 04, 2000 (20000104)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Maynard MA (Massachusetts) US (United States of America)

Turin Lisa M Redwood City CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 8-482,080

FILED: June 07, 1995 (19950607)

This application is a division, of application Ser. No. 08-171,389, filed Dec. 20, 1993, U.S. Pat. No. 5,578,444, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 08-123,936, filed Sep. 17, 1993, U.S. Pat. No. 5,726,014, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 07-996,783, filed Dec. 23, 1992, U.S. Pat. No. 5,693,463, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 07-723,618, filed Jun. 27, 1991, now abandoned and being prosecuted as co-owned, file-wrapper continuation Ser. No. 08-081,070, filed Jun. 22, 1993, U.S. Pat. No. 5,306,619 and herein incorporated by reference.

Full Text: 14120 lines

ABSTRACT

The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

2/3,AB/38 (Item 3 from file: 654)

03028381

Utility

REGULATION OF EXOPROTEIN IN STAPHYLOCOCCUS AUREUS

[The sar protein and gene are useful in preventing or treating staph infections, and in diagnostic kits and assays for detecting the presence of the sar protein and sar gene.]

Patent Number: 5,976,792

ISSUED: November 02, 1999 (19991102)

Inventor: Cheung Ambrose New York NY (New York) US (United States of America)
Fischetti Vincent A West Hempstead NY (New York) US (United States of America)

Assignee: Siga Pharmaceuticals Inc (A U.S. Company or Corporation) New York NY (New York) US (United States of America)
[Assignee Code(s): 47263]

Extra Information: Assignment transaction [Reassigned] recorded March 8, 2000 (20000308)

Application Number: 8-676,782

FILED: July 08, 1996 (19960708)

RELATED APPLICATIONS

This application is a continuation-in-part of U.S. application Ser. No. 08-248,505, filed May 24, 1994 now U.S. Pat. No. 5,587,288.

Full Text: 1731 lines

ABSTRACT

The present invention provides a staphylococcal accessory regulatory protein sar, and the gene encoding that protein(sar). This protein relates to the recognition and control of bacterial infections, particularly infections caused by *Staphylococcus aureus* (*S. aureus*). The sar protein and gene are thus useful in preventing or treating staph infections, and in diagnostic kits and assays for detecting the presence of the sar protein and sar gene.

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2/3,AB/39 (Item 4 from file: 654)

02910352

Utility

METHOD OF DETERMINING DNA SEQUENCE PREFERENCE OF A DNA-BINDING MOLECULE

[Incubating test molecule, DNA binding protein, and duplex DNA test oligonucleotide composed of test sequence and protein binding sequence; separating test oligonucleotides not bound to binding protein, amplifying, sequencing; viricides]

Patent Number: 5,869,241

ISSUED:February 09, 1999 (19990209)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Maynard MA (Massachusetts) US (United States of America)

Turin Lisa M Redwood City CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 8-475,228

FILED: June 07, 1995 (19950607)

This application is a divisional of application Ser. No. 08-171,389 filed 20 Dec. 1993 and now U.S. Pat. No. 5,578,444, herein incorporated by reference, which is a continuation-in-part of application Ser. No. 08-123,936 filed 17 Sep. 1993 and now U.S. Pat. No. 5,726,014, herein incorporated by reference, which is a continuation-in-part of application Ser. No. 07-996,783 filed 23 Dec. 1992 and now U.S. Pat. No. 5,693,463, herein incorporated by reference, which is a continuation-in-part of application Ser. No. 07-723,618 filed 27 Jun. 1991, now abandoned, and being prosecuted as co-pending, co-owned file-wrapper continuation 08-081,070, filed 22 Jun. 1993, now U.S. Pat. No. 5,306,619, herein incorporated by reference.

Full Text: 14067 lines

ABSTRACT

The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

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2/3,AB/40 (Item 5 from file: 654)

02809831

Utility

METHODS AND MATERIALS FOR THE DETECTION OF STAPHYLOCOCCUS AUREUS

Patent Number: 5,776,712
ISSUED: July 07, 1998 (19980707)

Inventor: Kuusela Pentti Helsinki FI (Finland)
Hilden Pekka Helsinki FI (Finland)

Assignee: Helsinki University Licensing Ltd (A Non-U.S. Company or Corporation)
Helsinki FI (Finland)
[Assignee Code(s): 37203]

Extra Information: Assignment transaction [Reassigned] recorded March 22, 1999 (19990322)

Application Number: 8-610,389
FILED: March 04, 1996 (19960304)

The present application is a continuation-in-part of U.S. patent application Ser. No. 08-169,524, filed Dec. 17, 1993 U.S. Pat. No. 5,496,706.

Full Text: 879 lines

ABSTRACT

The present application discloses a novel method for the detection of *Staphylococcus aureus* and methicillin-resistant strains of *Staphylococcus aureus*. Further disclosed is an approximately 230 kDa protein and the use of such protein in detection assays for *Staphylococcus aureus* and in other diagnostic and therapeutic applications. Also disclosed are methods of purifying the protein and biologically active fragments thereof.

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2/3,AB/41 (Item 6 from file: 654)

02803471

Utility

**PHARMACEUTICAL DIPEPTIDE COMPOSITIONS AND METHODS OF USE THEREOF:
SYSTEMIC TOXICITY**

[Administering glutamic acid-tryptophan dipeptide to stimulate binding function of T-lymphocytes]

Patent Number: 5,770,576

ISSUED: June 23, 1998 (19980623)

Inventor:

Morozov Vyacheslav G St. Petersburg RU (Russian Federation)

Khavinson Vladimir Kh St. Petersburg RU (Russian Federation)

Assignee:

Cytran Inc (A U.S. Company or Corporation) Kirkland WA (Washington) US
(United States of America)

[Assignee Code(s): 45946]

Extra Information: Assignment transaction [Reassigned] recorded September 1, 1998
(19980901)

Application Number: 8-452,077

FILED: May 26, 1995 (19950526)

This application is a continuation-in-part of application Ser. No 08-278,463 filed Jul. 21, 1994 (abandoned) which is a continuation-in-part of application Ser. No. 08-257,495 filed Jun. 7, 1994 (abandoned) which is a continuation of Ser. No 07-783,518 filed Oct. 28, 1991 (abandoned) which is a continuation-in-part of Ser. No. 07-678,129 filed Apr. 1, 1991 (abandoned) which is a continuation-in-part of Ser. No. 07-415,283 filed Aug. 30, 1989 (abandoned). Application Ser. No. 07-415,283 is a national stage application of PCT-SU88,00255 filed Dec. 14, 1988 which claims a priority date from SU Patent 4,352,833 filed Dec. 30, 1987. Application Ser. No. 08-337,341 filed Nov. 10, 1994 is a divisional of Ser. No. 07-415,283 and issued as U.S. Pat. No. 5,538,951. All the above patent applications are hereby incorporated by reference.

Full Text: 10093 lines

ABSTRACT

Methods of treatment of subjects with systemic toxicity by administering an R'-Glu-Trp-R" pharmaceutical preparation.

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2/3,AB/42 (Item 7 from file: 654)

02775747

Utility

SEQUENCE-DIRECTED DNA-BINDING MOLECULES COMPOSITIONS AND METHODS

Patent Number: 5,744,131

ISSUED: April 28, 1998 (19980428)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Maynard MA (Massachusetts) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)
[Assignee Code(s): 33390]

Application Number: 8-476,876

FILED: June 07, 1995 (19950607)

This application is a division of application Ser. No. 07-996,783 filed Dec. 23, 1992, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 07-723,618, filed 27 Jun. 1991 now abandoned.

Full Text: 5877 lines

ABSTRACT

The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

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2/3,AB/43 (Item 8 from file: 654)

02770253

Utility

SEQUENCE-DIRECTED DNA-BINDING MOLECULES COMPOSITIONS AND METHODS

Patent Number: 5,738,990

ISSUED: April 14, 1998 (19980414)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)
Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Maynard MA (Massachusetts) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 8-475,221

FILED: June 07, 1995 (19950607)

This application is a division of application Ser. No. 07-996,783 on Dec. 23, 1992, herein incorporated by reference, which is a continuation-in-part of co-owned U.S. application Ser. No. 07-723,618, filed 27 Jun. 1991 now abandoned.

Full Text: 5857 lines

ABSTRACT

The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

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2/3,AB/44 (Item 9 from file: 654)

02755945

Utility

SCREENING ASSAY FOR THE DETECTION OF DNA-BINDING MOLECULES

[Analyzing a protein test sample by binding with oligonucleotides, incubation, separation, genetic determining the free-binding test oligonucleotide]

Patent Number: 5,726,014

ISSUED:March 10, 1998 (19980310)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Watertown MA (Massachusetts) US (United States of America)

Turin Lisa M Berkeley CA (California) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 8-123,936

FILED: September 17, 1993 (19930917)

This application is a continuation-in-part of co-owned, co-pending U.S. application Ser. No. 07-996,783, filed 23 Dec. 1992, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 07-723,618, filed 27 Jun. 1991, now abandoned.

Full Text: 13570 lines

ABSTRACT

The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

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2/3,AB/45 (Item 10 from file: 654)

02745502

Utility

METHOD OF CONSTRUCTING SEQUENCE-SPECIFIC DNA-BINDING MOLECULES

[Identifying small molecule preferentially binding to specified four base-pair sequence, coupling to form DNA-binding agent]

Patent Number: 5,716,780

ISSUED:February 10, 1998 (19980210)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Watertown MA (Massachusetts) US (United States of America)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 8-484,499

FILED: June 07, 1995 (19950607)

This application is a division of application Ser. No. 07-996,783 Dec. 23, 1992, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Ser. No. 07-723,618, filed 27 Jun. 1991 now abandoned.

Full Text: 5477 lines

ABSTRACT

The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

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2/3,AB/46 (Item 11 from file: 654)

02718988

Utility

METHOD OF ORDERING SEQUENCE BINDING PREFERENCES OF A DNA-BINDING MOLECULE

[Measuring amount of protein bound to double-stranded DNA test oligonucleotide before and after incubation, repeating with different test sequences, comparison for rank order]

Patent Number: 5,693,463

ISSUED:December 02, 1997 (19971202)

Inventor: Edwards Cynthia A Menlo Park CA (California) US (United States of America)

Fry Kirk E Palo Alto CA (California) US (United States of America)

Cantor Charles R Boston MA (Massachusetts) US (United States of America)

Andrews Beth M Maynard MA (Massachusetts) US (United States of America) (filed under Rule 47)

Assignee: Genelabs Technologies Inc (A U.S. Company or Corporation) Redwood City CA (California) US (United States of America)

[Assignee Code(s): 33390]

Application Number: 7-996,783

FILED: December 23, 1992 (19921223)

Disclaimer: April 26, 2011 (20110426)

This application is a continuation-in-part of co-owned, U.S. application Ser. No. 07-723,618, filed 27 Jun. 1991 abandoned.

Full Text: 5514 lines

ABSTRACT

The present invention defines an assay useful for screening libraries of synthetic or biological compounds for their ability to bind specific DNA test sequences. The assay is also useful for determining the sequence specificity and relative DNA-binding affinity of DNA-binding molecules for any particular DNA sequence. Also described herein are potential applications of the assay, including: 1) the detection of lead compounds or new drugs via the mass screening of libraries of synthetic or biological compounds (i.e., fermentation broths); 2) the design of sequence-specific DNA-binding drugs comprised of homo- or hetero-meric subunits of molecules for which the sequence specificity was determined using the assay; and 3) the use of molecules for which sequence specificity was determined using the assay as covalently attached moieties to aid in the binding of nucleic acid or other macromolecular polymers to nucleic acid sequences.

2/3,AB/47 (Item 12 from file: 654)

02593694

Utility

SEQUENCE-DIRECTED DNA-BINDING MOLECULES COMPOSITIONS AND METHODS

Patent Number: 5,578,444

ISSUED: November 26, 1996 (19961126)

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[Assignee Code(s): 33390]

Application Number: 8-171,389

FILED: December 20, 1993 (19931220)

This application is a continuation-in-part of co-owned, co-pending U.S. application Ser. No. 08-123,936, filed Sep. 17, 1993, herein incorporated by reference, which is a continuation-in-part of co-owned, co-pending U.S. application Ser. No. 07-996,783, filed Dec. 23, 1992, herein incorporated by reference, which is a continuation-in-part of co-owned, U.S. application Serial No. 07-723,618, filed Jun. 27, 1991, now abandoned and being prosecuted as co-pending, co-owned, file-wrapper continuation 08-081,070, filed Jun. 22, 1993, now allowed and herein incorporated by reference.

Full Text: 13791 lines

ABSTRACT

The present invention defines a DNA:protein-binding assay useful for screening libraries of synthetic or biological compounds for their ability to bind DNA test sequences. The assay is versatile in that any number of test sequences can be tested by placing the test sequence adjacent to a defined protein binding screening sequence. Binding of molecules to these test sequence changes the binding characteristics of the protein molecule to its cognate binding sequence. When such a molecule binds the test sequence the equilibrium of the DNA:protein complexes is disturbed, generating changes in the concentration of free DNA probe. Numerous exemplary target test sequences (SEQ ID NO:1 to SEQ ID NO:600) are set forth. The assay of the present invention is also useful to characterize the preferred binding sequences of any selected DNA-binding molecule.

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2/3,AB/48 (Item 13 from file: 654)

02503856

Utility

METHODS AND MATERIALS FOR THE DETECTION OF STAPHYLOCOCCUS AUREUS

[Antibiotic resistance]

Patent Number: 5,496,706

ISSUED: March 05, 1996 (19960305)

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Helsinki FI (Finland)

[Assignee Code(s): 37203]

Extra Information: Assignment transaction [Reassigned] recorded March 22, 1999 (19990322)

Application Number: 8-169,524

FILED: December 17, 1993 (19931217)

Full Text: 568 lines

ABSTRACT

The present application discloses a novel method for the detection of *Staphylococcus aureus* and methicillin-resistant strains of *Staphylococcus aureus*. Further disclosed is an approximately 230 kDa protein and the use of such protein in detection assays for *Staphylococcus aureus* and in other diagnostic applications.

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2/3,AB/49 (Item 14 from file: 654)

02182971

Utility

PROTEIN ARP, WITH IMMUNOGLOBULIN A BINDING ACTIVITY, THE CORRESPONDING VECTORS AND HOSTS, REAGENT KIT AND PHARMACEUTICAL COMPOSITION

Patent Number: 5,210,183
ISSUED: May 11, 1993 (19930511)

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[Assignee Code(s): 21835]

Extra Information: Assignment transaction [Reassigned] recorded June 10, 1997 (19970610)

Application Number: 7-270,099
FILED: November 14, 1988 (19881114)

Priority: 878501600 EP (European Patent Office) May 13, 1987 (19870513)

This is a continuation-in-part of application Ser. No. 07-186,097, filed Apr. 25, 1988, now abandoned.

Full Text: 517 lines

ABSTRACT

This invention relates to a new protein subfragments thereof with affinity for immunoglobulin A, a process for cloning and expression of the protein, the corresponding vectors and hosts, a process for preparing the organism, a method for preparing the protein, a reagent kit and a pharmaceutical composition comprising the protein or fragments thereof.

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